

Claims

- 1) Double burner for gas cookers, of the type provided with multiple concentric flame crowns, which comprises:
 - one head (T) with multiple concentric flame crowns;
 - one circular body (1) that contains partitions (9) used to define two different, 5 not-communicating channels, of which one channel (E) is used to supply gas to the crowns of external flames (FE) and one channel (C) is used to supply gas to the central flames (FC);
 - two separate, not-communicating gas inlets (3 and 4) situated on the bottom of the body (1), used to supply gas to the aforementioned channels (C and E) 10 selectively;

burner being characterised by the fact that the gas inlets (3 and 4) reach the centre of the body at a slightly different height.
 - 2) Burner as defined in the preceding claim, characterised by the fact that the upper inlet (3) exactly ends in the centre of the body (1) and the lower inlet (4) 15 goes beyond the centre.
 - 3) Burner as defined in one of the preceding claims, characterised by the fact that the axes of the two inlets (3 e 4) lay on orthogonal vertical planes.
 - 4) Burner as defined in one of the preceding claims, characterised by the fact that a vertical channel (3a) branches off from the upper inlet (3), which is 20 provided with the first gas nozzle (5) designed to introduce gas into the central channel (C) that supplies the central flames (FC), while a diverging pair of ascending channels (4a) branches off from the lower inlet, which is provided with nozzles (6) designed to introduce gas into the channel (E) that supplies the external flames (FE); it being provided that a Venturi chamber (5a) with vertical 25 axis is situated downstream the nozzle (5), and a pair of Venturi chambers (6a) is situated downstream the pair of nozzles (6)..
 - 5) Burner as defined in the preceding claim, characterised by the fact that the

chambers (6a) have an inclined axis.

6) Burner as defined in one of the preceding claims, characterised by the fact that the head (T) is composed of a lower dish (7) and an upper dish (8,80) that match perfectly, the lower dish (7) having a truncated conical shape and a
5 stepped external border (7a) that acts as support and centring for the upper dish (8,80), which is provided with a stepped perimeter collar (8a) and finds a second support and centring in the flat flange (9a) situated at the top of the partition walls (9) that protrude from the centre of the body (1) and separate the channels (C and E).

10 7) Burner as defined in the preceding claim, characterised by the fact that the lower dish (7) and the upper dish (8,80) feature semi-conduits (7b and 8b), respectively, which form the Venturi chambers (6a) .

8) Burner as defined in one or more of the preceding claims, characterised by the fact that it comprises a V-shaped deflector wall (10) on the lower dish (7)
15 situated downstream the chambers (6a), which favours the bifurcation of the air-gas flow coming from the chambers (6a), which is conveyed inside a semi-circular corridor (11) that feeds the concentric central flames (FC) .

9) Burner as defined in one or more of the preceding claims, characterised by the fact that the head (T) comprises an annular cap (13) and a circular cap (14)
20 used to close the corridor (11) and the Venturi chamber (5), respectively; it being provided that the dish (8) is provided with toothed crowns (12) shaped in such a way as to give a horizontal direction to the flames, together with the caps (13 and 14).

10) Burner as defined in one or more of claims 1 to 8, characterised by the fact
25 that the head (T) comprises an annular cap (130) and a circular cap (140) that close the corridor (11) and the Venturi chamber (5), respectively; it being provided that the dish (80) has three toothed crowns (12) shaped in such a way as to give a vertically inclined direction to the flames, together with the caps (130 and 140).

11) Burner as defined in one or more of the preceding claims, characterised by the fact that it is provided with a hole (15) with vertical axis on the body (1) in central position that starts from the lower gas inlet (4), moves up and ends in the coaxial channel (3a) with the nozzle (5) and additionally characterised by the fact
5 that the upper conduit (3) is blocked in the presence of the hole (15).